

U.S. Application No. 10/067,486

Attorney Docket No. 09792909.5361

REMARKS

Claims 18-33 are presently pending in the application. Claims 1-17 have been canceled. Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

The Examiner has objected to the Abstract of the Disclosure as containing legal phraseology. The Abstract has been amended to remove any legal phraseology noted by the Examiner, and to ensure that it meets the limit of 150 words.

The Examiner has requested Fig. 22, which was originally described in the specification. The Applicant respectfully points out to the Examiner that Fig. 22 was deleted from the description by Preliminary Amendment dated May 31, 2002. Accordingly, the Examiner's objection to the drawings should be withdrawn.

The Examiner has objected to Claim 20 due to a grammatical error. Claim 20 has been amended to correct for the grammatical error. Further, the claims have been amended to correct for minor formalities, such as lack of antecedent basis, and for matters of form.

The Examiner has rejected Claims 18-23, 26-29, and 32, under 35 U.S.C. §102(e) as being anticipated by Sato et al. '123. Further, the Examiner has rejected Claims 24, 30, 31, and 33, under 35 U.S.C. §103 as being unpatentable over Sato et al. Finally, the Examiner has rejected Claim 25 under 35 U.S.C. §103 as being unpatentable over Sato et al. in view of Mano. For the following reasons, the prior art rejections are respectfully traversed.

The Applicant respectfully submit that Sato et al. do not teach or suggest a method of making a semiconductor substrate including the steps of forming a variant impurity layer with an impurity concentration varying in a depth direction on one surface of a supporting substrate by means other than anodic oxidation; and forming a porous layer by providing pores in the variant impurity layer by anodic oxidation so that a porosity in the porous layer varies in the depth direction, as recited in amended Claim 18, and as substantially recited in amended Claims 30, 32, and 33.

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Rather, Sato et al. disclose forming a porous Si layer on the Si substrate by anodizing the Si substrate in HF solution, which results in a substrate 11 with a porous surface layer 12. Then, porous layer 13 having a large porosity is formed in the porous layer 12 by ion implantation.

Accordingly, Sato et al. disclose the reverse of the present invention, where the anodic oxidation is performed first on the Si substrate 11, and then ion implantation thereafter, whereas in the present invention, the variant layer is formed by means other than anodic oxidation (i.e., CVD process), and then the porous layer is formed by anodic oxidation.

Thus, the present invention obtains a semiconductor substrate having a porous layer allowing ready cleavage in the porous layer by decreasing the current density during anodic oxidation.

Thus, Claims 18, 30, 32 and 33 are not anticipated nor obvious over either the individual or the combination of the Sato et al. and Mano references, and the rejection of Claims 18, 30, 32, and 33 should be withdrawn.

Further, since Claims 19-29 depend from Claim 18, and Claim 31 depends from Claim 30, they are also patentably distinguishable over either the individual or the combination of the Sato et al. and Mano references for the reasons cited above with respect to Claims 18, 30, 32, and 33.

If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

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Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account No. 19-3140.

Respectfully submitted,

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